

Work Order ID 124755

124755

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September-23-14 7:42:18 AM

Item ID: D3192-042 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Pod Assembly
 Start Date: 9/23/14 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 12/31/14 Req'd Qty: 1.00 *1* Customer:

Reference:

Approvals: Process Plan: MLJ Date: 14-09-23 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3192	C								

100 PURCHASING 0.00
 100
 Purchasing Memo 0.00
 Purchasing Issue P/O: 25088
 Description:
 D2200-1 Pod Lid
 D2200-3 Pod Base
 Supplier: Delastek
 Copy of Certificate of Conformity and Process sheet from Delastek is required.

C2 14/09/23 ①

110 Receive & Inspect for Damage & Mat'l Certs 0.00
 110
 Packaging Memo 0.00
 Packaging Ensure Certificate of Conformity and Process sheet from Delastek is attached.

* 14/09/23 SP 14-12-22

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Item ID: D3192-042 Accept ***N900040100*** Setup Start ***NS1***
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 Item Name: Pod Assembly
 Start Date: 9/23/14 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 12/31/14 Req'd Qty: 1.00 ***1*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150		0.00							
150	Small Fab								
Small Fab	Memo	0.00							
Small Fab	Assemble as per Dwg D3192								

160	QC5- Inspect part completeness to step on W/O	0.00							
160									
QC	Memo	0.00							
Quality Control									

165		0.00							
165									
Purchasing	Memo	0.00							
Purchasing	ISSUE NEGATIVE PO TO CHARGE DELASTEK FOR REWORK NEEDED TO BE DONE, SEE ATTACHED EMAIL, FOR AMOUNT OF \$584.12								

PO _____

Ref. SAV-8860 440.56
 on credit invoice / Neg PO

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Item ID: D3192-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Pod Assembly
Start Date: 9/23/14 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 12/31/14 Req'd Qty: 1.00 ***1*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: _____	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

124751 MF 15-1-21

MLJ 15-01-21

MF 15-1-21

DQA:

Date: 15/03/31

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date: Feb 20

Work Order update only ☐

Work Order: 124755	DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS			
Part No. D3192-042		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
NCR No. 15-4521		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
		Large Fab ☐	Composite ☐	Supplier ☒	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data	15/1/10	130	1	FINISH ON INSIDE OF POD IS ESTHETICALLY UNACCEPTABLE		ACCEPTABLE TO SMOOTH FINISH USING A PASTE OF HYSOL EA934 AND MILLED FIBERS AND	Shm 15/1/15	15/01/15	PD
Equip/Tooling						RE-FINISH WITH DUPONT HIGHBUILD GREY PRIMER AND/OR TO SAND +			15-01-16
Handling/Pre						REFINISH WITH ADDITIONAL COATS OF DUPONT HIGHBUILD GREY PRIMER PER DWG.			
Material									
Operator									
Offset/Setup									
Process									
Supplier				R.C. supplier					
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☒ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	---	---	--	--



Supplier Non-Conformance Report

Reviewed			
DQA:			
Date:			
Printed on: Wednesday, January 07, 2015			
Details			
Raised Date 1/7/2015	Status Open	Owner Smith, Patrick	Number NCR15-4521
Target Date 1/23/2015	Standard		Severity MAJOR
Process Supplier		Audit	
Raised By Person Downing, Eric M	Raised Against (Department or Supplier) Delastek Inc		Fault Category Supplier
Details found during incoming inspection that the inside finish of the D3192-041 (Base) B124755 PO#25888. the interior has a finish a wavy uneven finish to it. see attached pictures			
Keywords poor finish		Product D3192-041	
Document		Root Cause	
Closed By	Closed Date	Resolution	
Corrective Action			
Target Date 1/22/2015	Owner Downing, Eric M	Closed Date	Closed By
Details			
Actions			
Number	Owner	Target Date	Completed Date
Details		Response	
1	Lavoie, Chantal	1/14/2015	
Contact Supplier and obtain corrective action and root cause of issue			
2	Boyer, Sylvain	1/16/2015	
perform rework as per QSI 006 record all actions on back of work order		x Sylvain Boyer	
3	Downing, Eric M	1/16/2015	
inspect rework to ensure it was correctly done as per QSI006		PD 15-01-15	

Target Date 1/22/2015	Owner Smith, Patrick	Closed Date	Closed By
Details			

Number	Owner	Target Date	Completed Date
Details		Response	

Picklist Print

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Work Order ID: 124755

124755

Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A New Issue 08.07.17 DL
IPP rev:B 09-02-05 rev.B as per dwg DD verified by:EC IPP revC
11.07.21 revC dwg EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AD64ABS		Purchased	No			150	Each	562.0000	38	38			DAG 27/15/11/15
---------	--	-----------	----	--	--	-----	------	----------	----	----	--	--	--------------------

AD64ABS

Pop Rivet

Location	Loc Qty	Loc Code
st268	562	
123969	27	
125147	58	
M128728	477	

AN3-11A		Purchased	No			150	Each	497.0000	30	30			DAG 27/15/11/15
---------	--	-----------	----	--	--	-----	------	----------	----	----	--	--	--------------------

AN3-11A

Bolt

Location	Loc Qty	Loc Code
ST349	497	
123185	10	
m125709	253	
m130005	234	

AN3-5A		Purchased	No			150	Each	387.0000	30	30			DAG 27/15/11/15
--------	--	-----------	----	--	--	-----	------	----------	----	----	--	--	--------------------

AN3-5A

Bolt

Location	Loc Qty	Loc Code
ST350	387	
117423	6	
124561	2	
m126559	92	
m129507	91	
m130325	196	

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Work Order ID: 124755

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Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

AN4-11A

Purchased

No

150

Each

374.0000

6

6

AN4-11A

BOLT

DAG
27
9-29

15/1/15

Location

Loc Qty

Loc Code

FG	20	
120731	20	
ST356	182	
M128362	182	
ST514	172	
M126333	5	
M127376	58	
M128769	109	

AN4-5A

Purchased

No

150

Each

343.0000

13

13

AN4-5A

BOLT

DAG
27
9-29

15/1/15

Location

Loc Qty

Loc Code

CA	59	
m129682	59	
ST355	284	
120562	180	
15247	4	
m127817	100	

AN4-6A

Purchased

No

130

Each

1,780.000

1

1

AN4-6A

BOLT

DAG
27
9-29

15/1/15

Location

Loc Qty

Loc Code

ST355	428	
16067	4	
M128403	424	
ST514	1352	
M126317	350	
M128634	1002	

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Shop Packet Print

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D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

AN526C632R7

Purchased No

150 Each

200.0000

2 2

DAG
27
8-89

15/1/15

AN526C632R7

Screw

**

Location

Loc Qty

Loc Code

ST329

200

m129339

200

2

D2198-1

Manufactured No

150 Each

4.0000

6 6

**

D2198-1

Bracket

N/A 5/15/14

Location

Loc Qty

Loc Code

ST004

4

80007

4

1

D2200-1

Manufactured No

100 Each

0.0000

1 1

**

D2200-1

Pod Lid

12/25 MF 5-12

D2200-3

Manufactured No

100 Each

0.0000

1 1

**

D2200-3

Pod Base

124755 MF 15-12

D2204-6

Manufactured No

150 Each

8.0000

3 3

**

D2204-6

Latch

DAG
27
8-89

15/1/15

Location

Loc Qty

Loc Code

ST479

8

67120

8

1

B126169

0

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Work Order ID: 124755

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Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

D2204-9 Manufactured No

150 Each 11.0000 2 2

D2204-9

Rubber Latches

**

DAG
27
8-20

15/1/15

Location

Loc Qty

Loc Code

ST119

11

107654

5

111010

2

113537

1

85081

3

B126168

2

D2258-220 Manufactured No

150 Each 12.0000 1 1

D2258-220

Placard

**

DAG
27
8-20

15/1/15

Location

Loc Qty

Loc Code

ST005

12

41266

4

84458

8

1

D2429-041 Manufactured No

150 Each 8.0000 1 1

D2429-041

Spring Clip Ass'y

**

DAG
27
8-20

15/1/15

Location

Loc Qty

Loc Code

ST008

8

107585

6

81895

2

B124757

1

D2463 Manufactured No

150 f 883.0137 14.167 15

D2463

1/2" Seal (\$Per Foot)

**

SMA
15/1/15

Location

Loc Qty

Loc Code

ST409

883.013684

110718

25.063684

115701

357.95

121929

500

B114238

15

* see attached e-mail

D2461

Picklist Print

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Work Order ID: 124755

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Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

D2528-1 Manufactured No

150 Each 5.0000 5 5

D2528-1

Backer Plate

**

DAG
27
8:00
15/1/15

Location

Loc Qty

Loc Code

ST007

5

B1B711

5

82334

5

D2528-3 Manufactured No

150 Each 0.0000 4 4

D2528-3

Backer Plate

**

DAG
27
8:00
15/1/15

B110938

4

D2569 Manufactured No

130 Each 3.0000 1 1

D2569

Hinge

**

N/A DAG
27
8:00

Location

Loc Qty

Loc Code

CA

3

110818

2

113832

1

D3007-041 Manufactured No

150 Each 3.0000 1 1

D3007-041

Prop Assy

**

DAG
27
8:00
15/1/15

Location

Loc Qty

Loc Code

ST259

1

84300

1

ST358

2

110916

2

D4393-17 Manufactured No

100 Each 0.0000 1 1

D4393-17

Piano Hinge

**

DAG
27
8:00
15/1/15

B124758

1

K10019 Manufactured No

150 Each 0.0000 1 1

K10019

Bracket Assembly

**

DAG
27
8:00
15/1/15

B124760

1

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124755

Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

MS21042L06

Purchased

No

150

Each

592.0000

2

2

MS21042I 06

Nut

DAG
27
8-89

15/1/15

Location

Loc Qty

Loc Code

ST306

200

m130325

200

ST307

392

m127304

3

m128976

189

m129499

200

MS21042L3

Purchased

No

150

Each

2,214.000

60

60

MS21042I 3

Nut

DAG
27
8-89

15/1/15

Location

Loc Qty

Loc Code

ST307

2214

123900

934

M127410

11

M127831

41

M128401

42

M128754

1186

130799

60

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Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

150

Each

3,916.000

20

20

MS21042I 4

Locknut

DAG
27
8-89

15/1/5

Location

Loc Qty

Loc Code

ST007

12

121444

12

ST307

3904

111827

2

126275

5

m126015

12

m126275

27

m127255

63

m127376

9

m127813

821

m128300

69

m128798

658

m129472

738

m129934

1500

20

NAS1149D0363J

Purchased

No

150

Each

2,277.000

60

60

NAS1149D0363.I

Washer

DAG
27
8-89

15/1/5

Location

Loc Qty

Loc Code

GA

7

124392

7

ST276

1005

m123441

5

m130358

1000

ST510a

1265

m128429

1265

m126319

60

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Parent Item: D3192-042

D3192-042

Parent Item Name: Pod Assembly

Start Date: 9/23/14

Required Date: 12/31/14

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463J

Purchased

No

150

Each

4,609.000

21

21

NAS1149D0463.J

WASHER

DAG

27

8-30

15/1/15

Location

Loc Qty

Loc Code

CA

485

M129682

485

ST277

4124

113706

1

16941

8

M126221

20

M127813

6

M127904

16

M128591

44

M128995

1500

M129390

2529

M130799

21

NAS1149DN632J

Purchased

No

150

Each

403.0000

2

2

NAS1149DN632.J

Washer

DAG

27

8-30

15/1/15

Location

Loc Qty

Loc Code

CA

46

M129682

46

ST277

357

M126084

11

M127255

100

M128812

246

2

ITEM	Qty -041	Qty -042	PART NUMBER	DESCRIPTION
1	X		D3192-041	UTILITY POD ASSEMBLY, LH
2		X	D3192-042	UTILITY POD ASSEMBLY, RH
5			D3192-1	DELETED AT REVISION C
9	1	1	D2195	BRACKET
10	1	1	D2196	BRACKET
11	1	1	D2197	BRACKET
12	6	6	D2198-1	BRACKET
13	1	1	D2200-1	POD LID
14	1	1	D2200-3	POD BASE
15	3	3	D2204-6	LATCH
16	2	2	D2204-9	LATCH
17	1	1	D2258-220	PLACARD
18	1	1	D2429-041	SPRING CLIP ASSEMBLY
19	1	1	D2463-1700	NEOPRENE SEAL
20	5	5	D2528-1	BACKER PLATE
21	4	4	D2528-3	BACKER PLATE
30	1	1	D3007-041	PROP ASSEMBLY
31	2	2	D3191-1	BACKER PLATE
32	3	3	D3191-3	BACKER PLATE
33	1	1	D3191-5	BACKER PLATE
34	1	1	D4393-17	PIANO HINGE
40	38	38	AD64ABS	RIVET
41	30	30	AN3-11A	BOLT
42	30	30	AN3-5A	BOLT
43	6	6	AN4-11A	BOLT
44	13	13	AN4-5A	BOLT
45	1	1	AN4-6A	BOLT
46	2	2	AN526C632R7	SCREW
47	60	60	AN960JD10	WASHER
48	21	21	AN960JD416	WASHER
49	2	2	AN960JD6	WASHER
50	2	2	MS21042L06	NUT (OR MS21042-06)
51	60	60	MS21042L3	NUT (OR MS21042-3)
52	20	20	MS21042L4	NUT (OR MS21042-4)

NOTES:

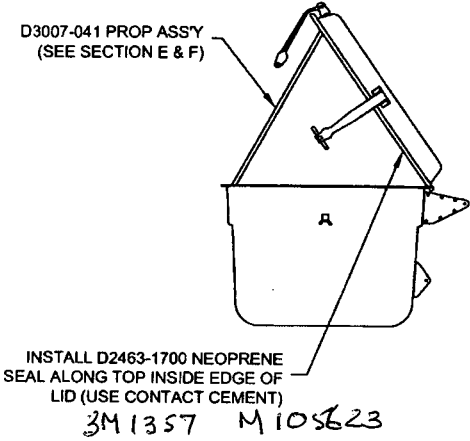
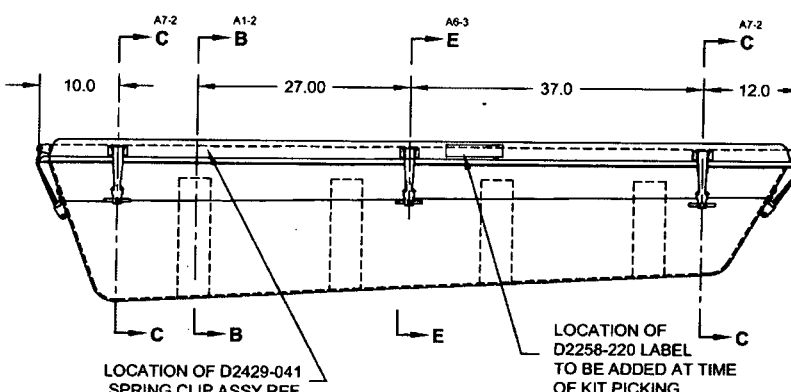
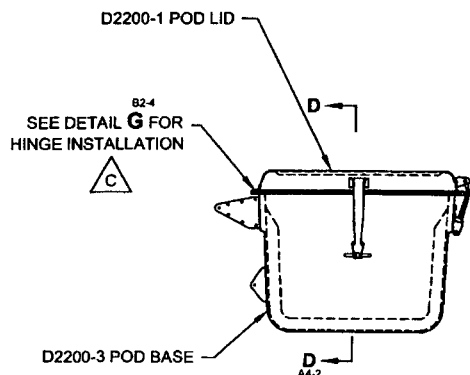
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 54 lbs APPROX
- 8) SEAL ALL HOLES AND EDGES OF POD LID (ITEM 13) AND BASE (ITEM 14) WITH CYANOACRYLATE GLUE.
- 9) FOR INSTALLATION OF D4393-17 HINGE:
 - (i) TRANSFER MARK AND DRILL POD LID (ITEM 13) AND BASE (ITEM 14) Ø.191.
 - (ii) INSTALL RIVET HEADS FROM OUTSIDE OF POD.
 - (iii) GRIND TRAILING EDGE OF RIVET TO 0.100 IN HEIGHT TO PERMIT HINGE TO CLOSE.
- 10) FOR HOLES DRILLED THROUGH FOAM CORE:
 - a) DRILL Ø.313" HOLES THROUGH POD.
 - b) CLEAN OUT FOAM Ø.250" AROUND HOLE BETWEEN INNER AND OUTER SKINS.
 - c) APPLY TAPE TO UNDERSIDE OF SKIN (TO STOP EPOXY FILLER GOING THROUGH).
 - d) FILL CAVITY BETWEEN SKINS COMPLETELY WITH "HYSOL EA934" OR SIMILAR EPOXY POTTING COMPOUND.
 - e) AFTER THE EPOXY HAS COMPLETELY CURED, DRILL Ø.257 FINISH HOLE SIZE FOR AN4 BOLT OR Ø.191 FINISH HOLE SIZE FOR AN3 BOLT.
- 11) RELIEVE D2200-1 POD LOCALLY IN AREA OF D2195/D2196/D2197 BRACKETS TO CLEAR BRACKETS.
- 12) INSTALL D3191-1/-3/-5 BACKER PLATE USING SIKAFLEX -241/-291 ADHESIVE.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 124755 MJS
1409-23

RELEASED
2011-05-20

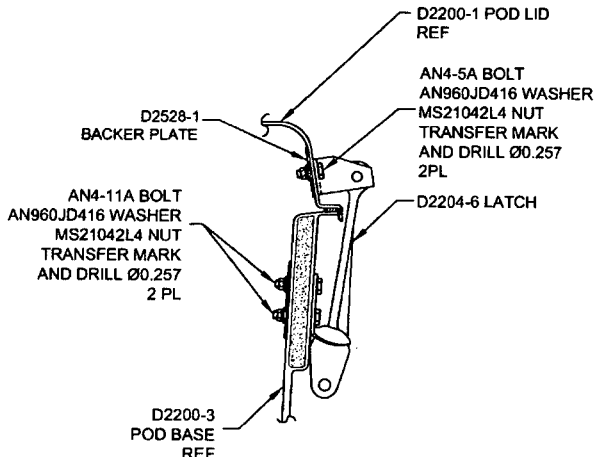
C	ADDED SHT 5. MOVED VIEWS FROM SHT 4 TO SHT 5. SHT 1 DELETED ITEM 5, ADDED ITEM 34. SHT 4 ADDED DETAIL G & DETAIL H. (SEE CAR 11-040).	AJS	11.05.05
B	DRAWING TRANSFERRED TO "B" SIZE AND REDRAWN WITH CURRENT STANDARDS. -1 HINGE ADDED. ADDED ITEM 33 (SEE NCR 08-110).	AJS	09.01.05
A	NEW ISSUE	DS	03.07.01
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3192	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD ASSEMBLY	NTS
DATE	11.05.05	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

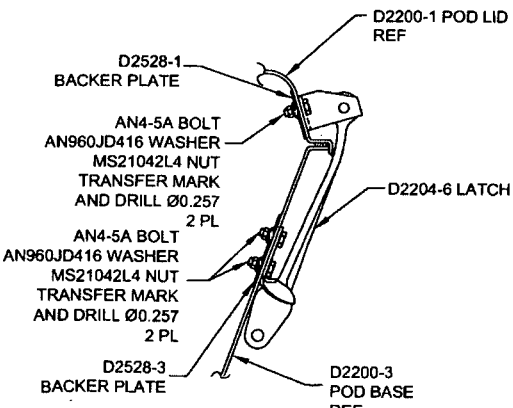


D3192-041 UTILITY POD ASSEMBLY, LH (SHOWN)
D3192-042 UTILITY POD ASSEMBLY, RA (OPPOSITE)

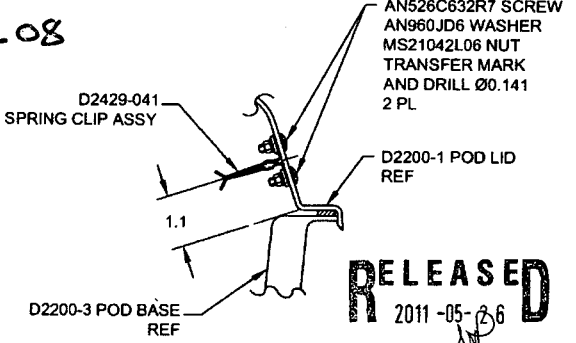
RH A.P.
15.01.08



SECTION C-C D3-2 D6-2
SCALE 4X



SECTION D-D C7-2
SCALE 4X

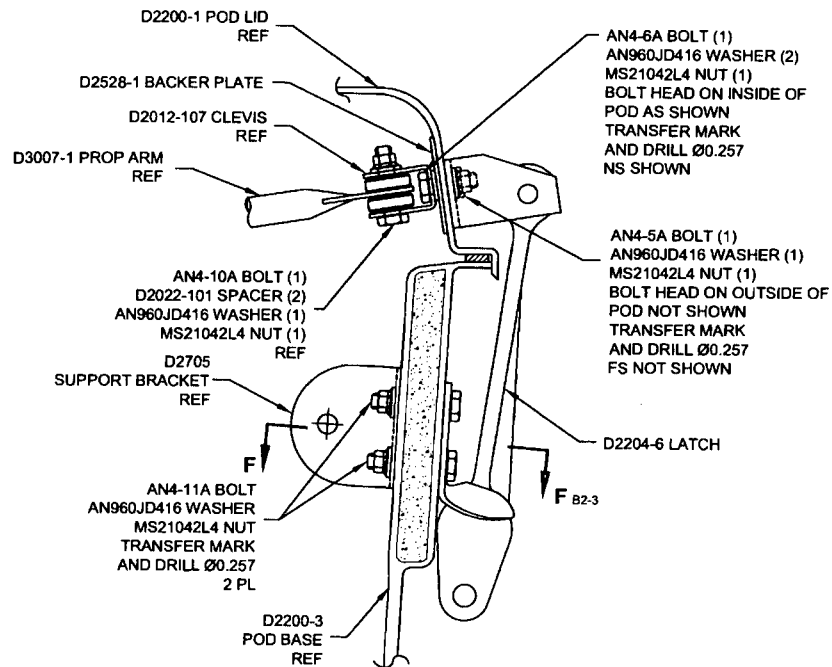


SECTION B-B D5-2
SCALE 6X

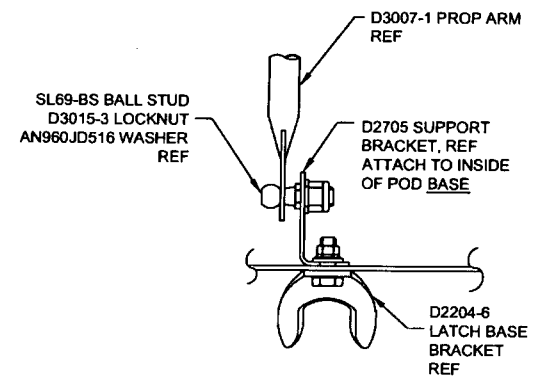
RELEASED
2011-05-26

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3192	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD ASSEMBLY	NTS
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8 7 6 5 4 3 2 1



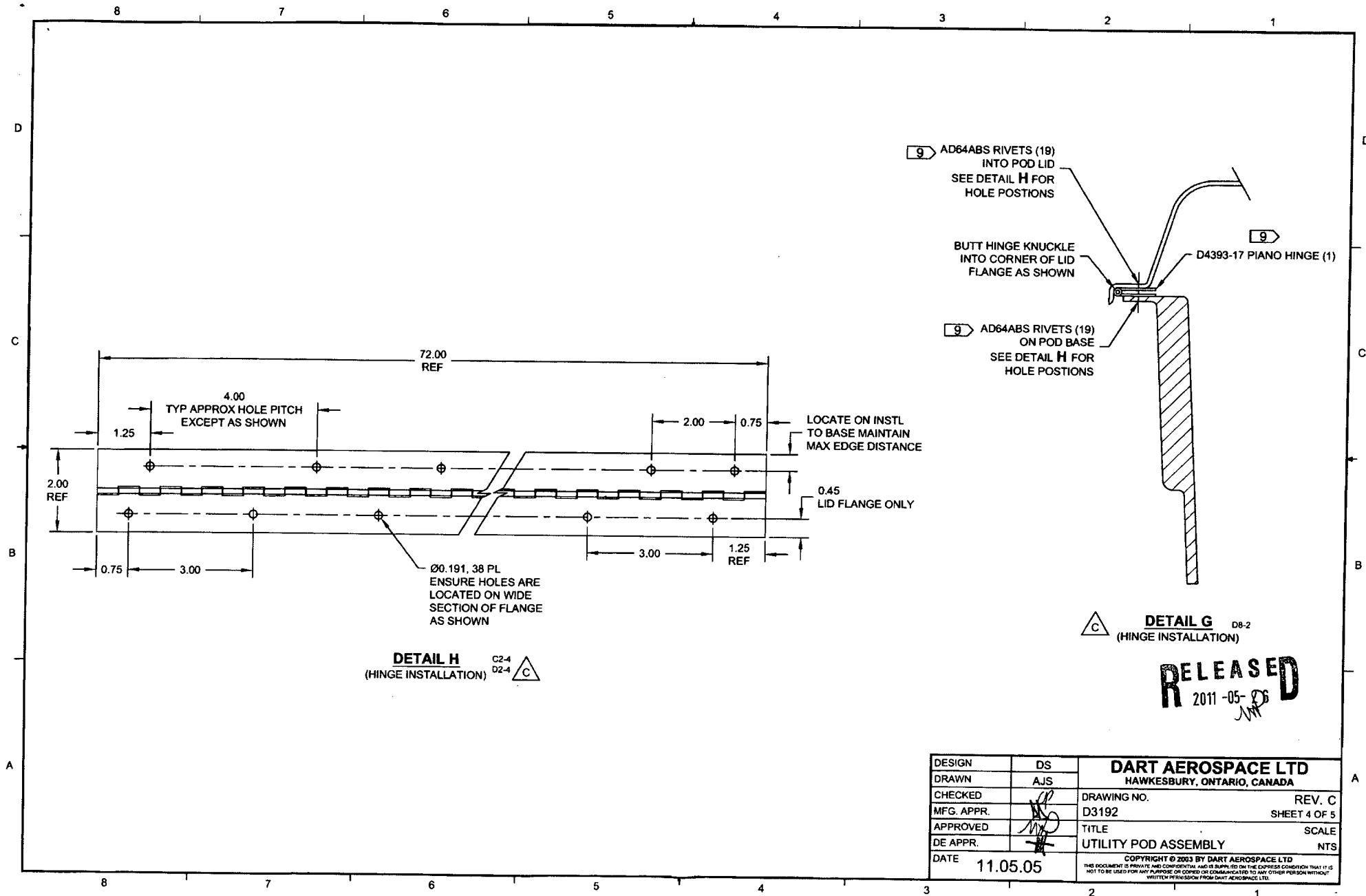
SECTION E-E D4-2

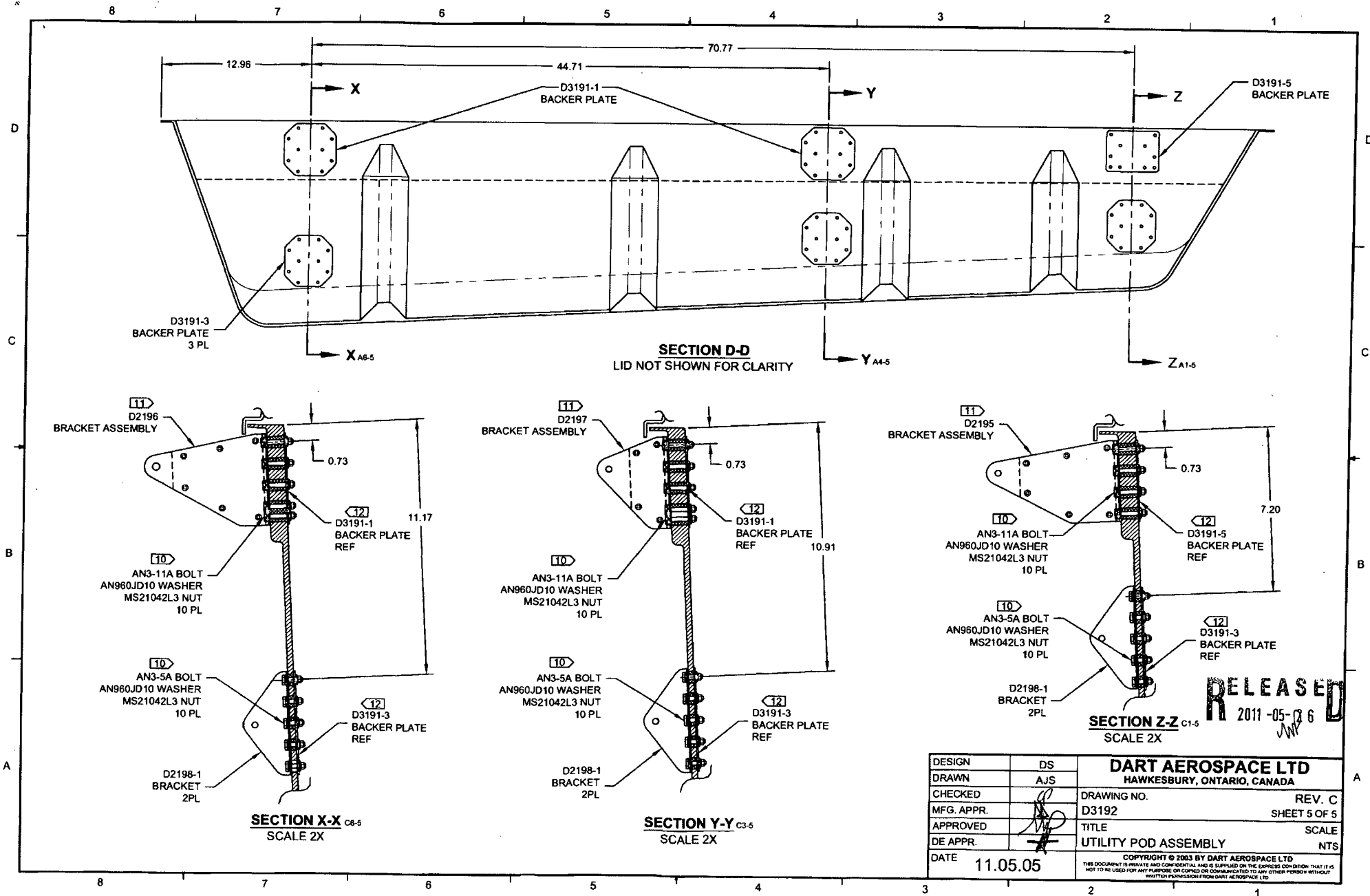


SECTION F-F C5-3
ROTATED 85° CW

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2011-05-26
JW

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3192	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD ASSEMBLY	NTS
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NOTES:

1) MATERIALS:

RESIN: EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40

FOAM: A500 CORE-CELL, OR DIVINYCELL, OR KLEGECELL, OR
AIREX, 0.38 THICK (3/8" FOAM)

FIBER: 9.7oz 7781 WEAVE "S" GLASS (9oz SATIN)
5oz PLAIN WEAVE KEVLAR (5oz KEVLAR)
12oz UNIDIRECTIONAL (12oz UNIDIRECTIONAL)
OWENS CORNING MILLED FIBERS, "E" GLASS

FILLER: MIXTURE OF RESIN AND MILLED FIBERS

EXPANDING FOAM: DEMILEC B352-0 / A100-4 (LIQUID FOAM)

2) FINISH: -INSIDE: DUPONT HIGHBUILD GREY PRIMER 7704S
-OUTSIDE: WHITE GELCOAT #GEL 944W005

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: N/A

7) WEIGHT: N/A

8) LAMINATE PER DART QSI 006
LAMINATION SCHEDULE PER THIS DRAWING.

9) PEEL PLY ALL SURFACES.

RELEASED
2011-05-26
MM

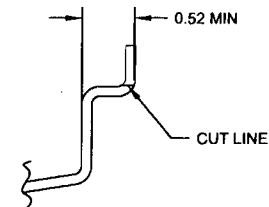
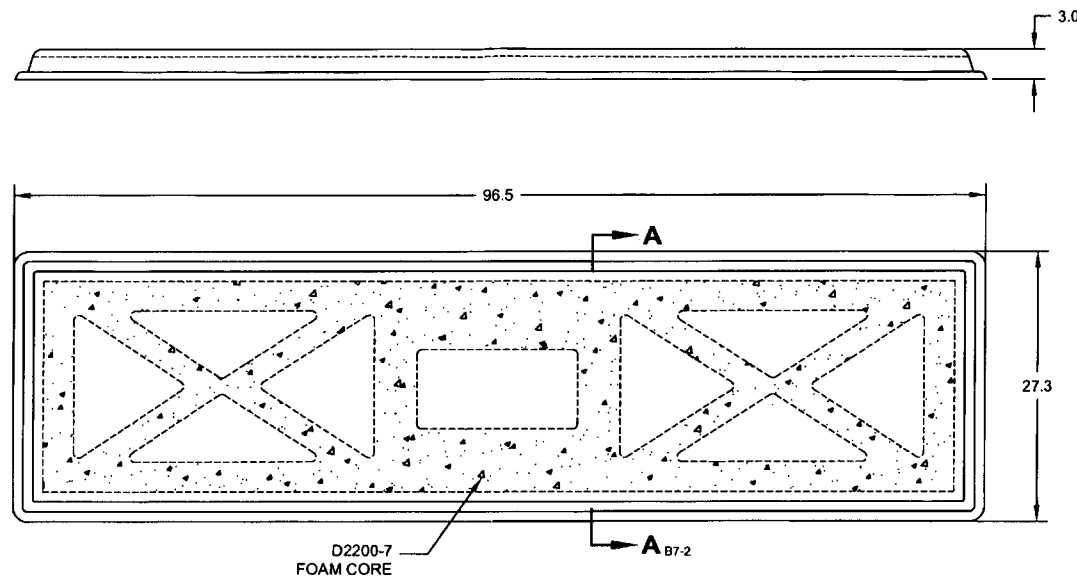
C	SHT 3, ZONE D5 DIM WAS 96.0, ZN B5 DIM WAS 27.0, ZN D6, MOLD DATUM RELOCATED TO FIXED POINT FOR CLARITY. (SEE CAR 10-26)	AJS	11.04.20
B	DRAWING TRANSFERRED TO "B" FORMAT AND UPDATED TO CURRENT STANDARDS. SHT 1 EXPANDING FOAM MATERIAL WAS GELCOTE VULTAFOAM W9900 A/B, FINISH SPEC UPDATED. MULTIPLE DIMS ON MULTIPLE SHEETS CHANGED FROM REF TO "HARD" CALLOUTS. SHT 2 D2200-7 WAS D2202-7 (TYPO). VIEWS FROM SHT 5 TRANSFERRED TO SHT 4. D2200-7 DETAILED ON SHT 5.	AJS	08.09.16
A	NEW ISSUE	JB	03.05.21
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D2200	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD LID AND BASE (212)	NTS
DATE	11.04.20	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8 7 6 5 4 3 2 1

D
C
B
A

SECTION A-A B4-2

DETAIL B B1-2



DETAIL B B4-2
SCALE 10X

D2200-1 LID
(MOLD DT8007)

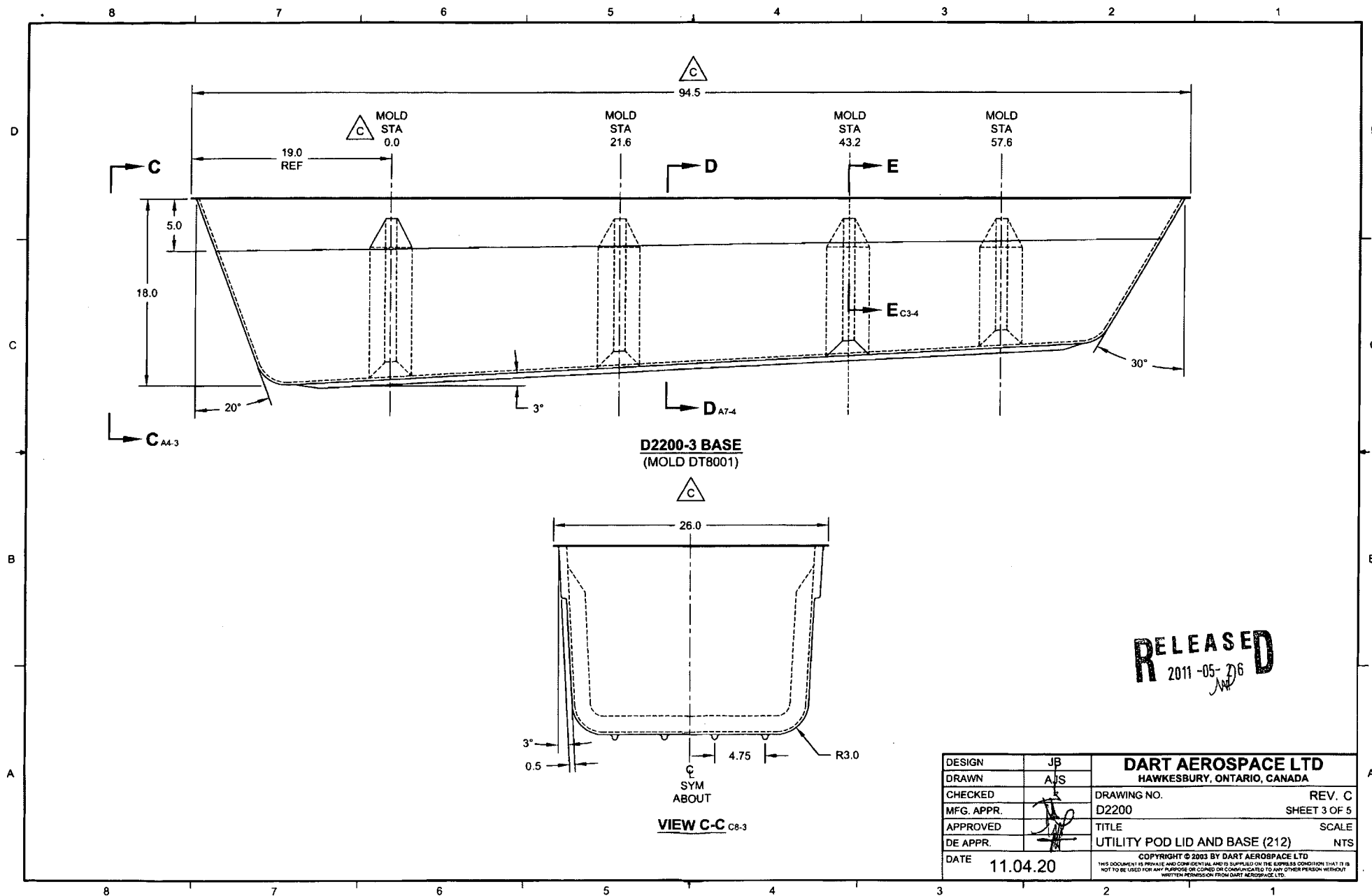
MAIN LAYUP

9oz SATIN
9oz SATIN
5oz KEVLAR
D2200-7 FOAM CORE
5oz KEVLAR
9oz SATIN

RELEASED
2011-05-26

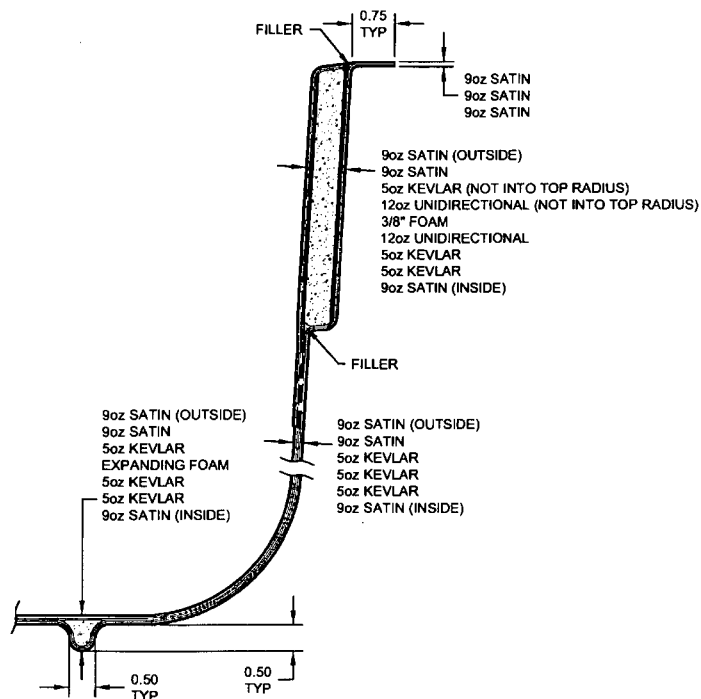
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	5	DRAWING NO.	REV. C
MFG. APPR.	1	D2200	SHEET 2 OF 5
APPROVED	3/10	TITLE	SCALE
DE APPR.	4/10	UTILITY POD LID AND BASE (212)	NTS
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8 7 6 5 4 3 2 1

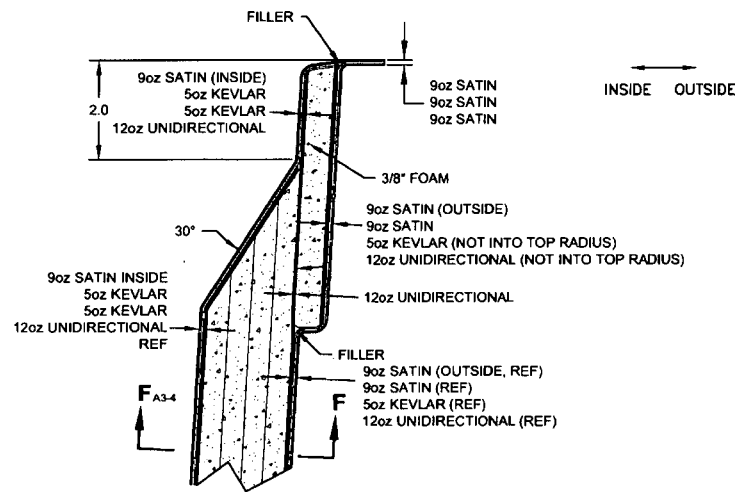


8 7 6 5 4 3 2 1

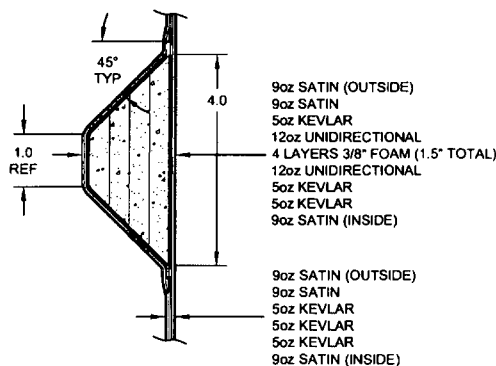
INSIDE OUTSIDE



SECTION D-D C4-3
(PART SECTION OF WALL SHOWN)



SECTION E-E C3-3
(PART SECTION OF WALL SHOWN)

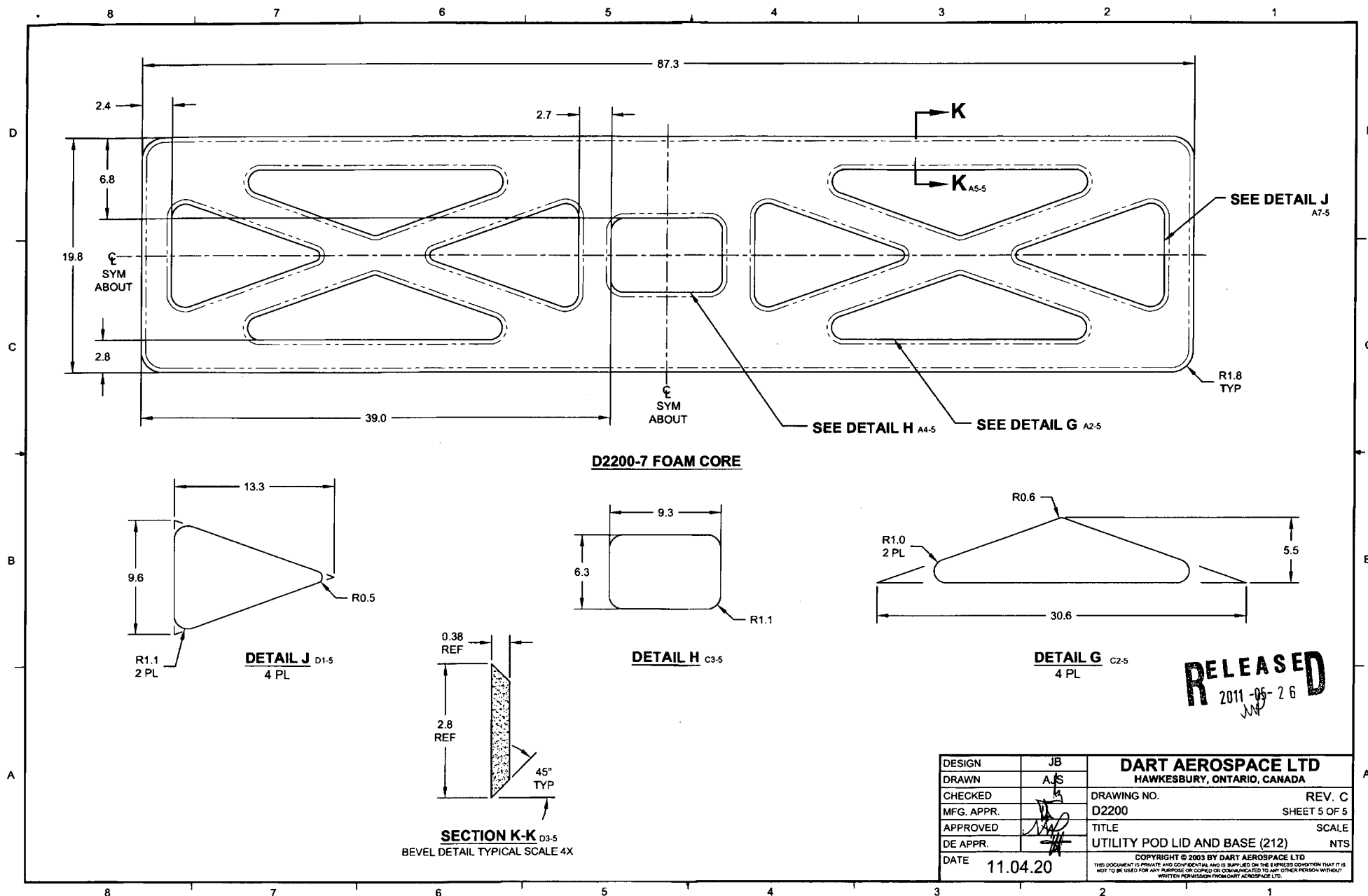


SECTION F-F C4-4

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WN

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DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. C
MFG. APPR.		D2200	SHEET 4 OF 5
APPROVED		TITLE	SCALE
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8 7 6 5 4 3 2 1



RELEASED
 2011-05-26

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.		D2200	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD LID AND BASE (212)	NTS
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO25888

Purchase Order Date 9/23/2014

PO Print Date 9/23/2014

Page Number 1 of 2

Order From:

VU-DEL003

Ship To: DART AEROSPACE LTD

DEI ASTEK INC
2600 SE AVENUE, LOCAL C.P 10100
GRAND-MERE, QC G9T 5K7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID

Contact Name

Vendor Phone

819 533 5788

Ship To Contact

Ship To Phone

Ship Via:

Day & Ross collect

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

USD

FCA - (Free Carrier)

Line No.	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
00100-1P		Pod Lid	11/28/2014 Yes 11/28/2014		1.00 Each <i>14/12/11</i> <i>SD</i>	\$2,890.60	\$2,890.60
AS PER DWG D2200 REV. C B114754							
Line Total:							\$2,890.60
00200-1P		Pod Base	11/28/2014 Yes 11/28/2014		1.00 Each <i>14/12/11</i> <i>SD</i>	\$2,890.60	\$2,890.60
AS PER DWG D2200 REV. C B114754							
Line Total:							\$2,890.60
00300-1P		Pod Lid	12/23/2014 Yes 12/23/2014		1.00 Each <i>✓</i>	\$2,890.60	\$2,890.60
AS PER DWG D2200 REV. C B114755							

SP14-12-22

Note:

9/23/2014



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO25888

Purchase Order Date 9/23/2014

PO Print Date 9/23/2014

Page Number 2 of 2

Order From:

VU-DEL003

Ship To: DART AEROSPACE LTD

DELAVER INC

1270 ABERDEEN

6091 ST AVENUE, LOCAL C.P 10100

HAWKESBURY, ON K6A 1K7

GRAND MERE, QC G9T 5K7

CANADA

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

819 533 5788

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

USD

Ship Via:

Day & Ross collect

FOB

FCA -- (Free Carrier)

Ship Acct:

Line Total:

\$2,890.00

QTY

Pod Base

12/23/2014

1.00

\$2,890.00

Yes

Each

12/23/2014

STP-R DWG D2200 REV. C

REV. C

Line Total:

\$0.00

QTY

PROCUREMENT
QUALITY CLAUSES

11/28/2014

1.00

\$0.00

No

12/23/2014

Procurement Quality Clauses

1. Supplier purchase

2. Right of entry

3. Personnel qualification

4. Certification of conformance

5. Notification of quality escape

6. Quality management

7. Supplier notification by supplier

8. Retention of quality documents

Line Total:

\$0.00

PO Total:

\$11,861.00

CSM

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr:

1

Change Date:

9/23/2014



DELASTEK Inc.
2699 5e Avenue
Local 14,
Grand-Mère, Québec G9T 2P7
Canada
Tel.: (819) 533-5788
Fax: (819) 533-3494

PACKING SLIP

CERTIFICATE OF COMPLIANCE

Invoice No.	59053
Customer No.	DART US

Bill To

DART AEROSPACE LTD
1270, Aberdeen Street
Hawksbury, Ontario K6A 1K7
Canada

Telephone : 613-632-9577

Contact : Dale Bates

Ship To

DART AEROSPACE LTD
1270, Aberdeen Street
Hawksbury, Ontario K6A 1K7
Canada

Telephone : 613-632-9577

Contact : Chantal Lavoie

Ship Date	Order Date	Our SO #	Ordered by	Your PO#	Terms
18-12-2014	24-09-2014	25021	Chantal Lavoie	PO25888	Net 30 days USA
Ship Via		F.O.B.		Salesperson	GST/PST
Fedex Freight LTL Collect		Point de départ		Melody Shapcott, ext. 235	
Order Qty	B.O. Qty	Current Ship.	Item number	Description	
1	0	✓ 1	DKC134-0079	Line #3 D2200-1 Utility Pod Lid (212) U of M: Chaque B124755 DWG: D2200 REV. C Serial # Lot # 64579 64579	
1	0	✓ 1	DKC134-0080	Line #4 D2200-3 Utility Pod Base (212) U of M: Chaque B124755 DWG D2200 REV. C Réf.: DK-362 DOCUMENT INCLUS Serial # Lot # 64582 64582	

SP 14-12-22

It is hereby certified that all materials, process and finished items were controlled and tested in accordance with the requirements of the purchase order and applicable specifications. All such records are on file at our plant and available for review upon request

Accepted by:

Mathieu Azouli

Quality department

AQ-357

☐ Cust. ☐ Adm. ☐ Quality ☐ Ship.

Date: Jeudi, 2014-09-25 12:13:20
Utilisateur: marc dubé

Feuille de Procédé

Client : DART US DART AEROSPACE
Numéro Job : 64579
Numéro : 5183
Numéro B.A. :
Cette fois : 2014-09-25 No. :
Prsht Rev. : NC
Prem. fois : - - Type :
Job précédente : 37910

Nom Dessin : D2200-1UTILITY POD LID (212)
Numéro Article : DKC134-0079
Numéro Dessin : 2200
Projet Numéro : DK-362
Révision dessin : C
Matériel : Composite
Date Dûe : 2014-10-02

Qté: 1 Ud UNITE

Écrit par :
Vérifié & Approuvé par :
Commentaires : N° de pièce Client: 2200-1



COPIE

Process Sheet Rév.: 00 Création du premier à partir du
DKC134-0026 Rév.: de Dessin B

Produit additionnel

Numéro Job:



# Séq.:	Machine ou	Description :
---------	------------	---------------

1.0	AAC1616	N° 83634, Frekote Loctite Wolo
-----	---------	--------------------------------

Comment Qty.: 0.500 UNITE(s)/Unit Total : 0.500 UNITE(s)
N° 83634, Frekote Loctite Wolo # de Lot: 48028/0AA

2.0	PREP-GENERAL	Préparation du matériel
-----	--------------	-------------------------



Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Faire la préparation du moule N° DT8007 selon IG 0009.

Date 20/10/14 Sceau:

3.0	AMB0350	Gel Coat Blanc N° Gel 944W005
-----	---------	-------------------------------

Comment Qty.: 0.250 KILOGRAMME(s)/Unit Total : 0.250 KILOGRAMME(s)
Gel Coat Blanc N° Gel 944W005 N° de Lot: 47931/0AA

4.0	AMB0286	Catalyst N° DDM-9
-----	---------	-------------------

Comment Qty.: 0.0800 GALLON(s)/Unit Total : 0.0800 GALLON(s)
Catalyst N° DDM-9 N° de Lot: 1-27829-1

5.0	GEL COAT	Application du Gel Coat
-----	----------	-------------------------



Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Préparer et appliquer le Gel Coat selon IG 0019

Date 20/10/14 Sceau:

Date: Jeudi, 2014-09-25 12:13:20
Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE	Nom Dessin: D2200-1UTILITY POD LID (212)	
Numéro Job: 64579	Numéro DKC134-0079	
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
6.0	AMB0214	9.7 oz Weave "S" glass #FG-778150-125Y Volan Finish
Comment	Qty.: 12.00 VERGE(s)/Unit Total : 12.00 VERGE(s) 9.7 oz Weave "S" glass #FG-778150-125Y Volan Finish N° de Lot: <u>1-49418-1</u>	
7.0	AAC1608	5oz plain weave Kevlar 50" wide roll
Comment	Qty.: 8.00 VERGE(s)/Unit Total : 8.00 VERGE(s) 5oz plain weave Kevlar 50" wide roll N° de Lot: <u>1-42765-1</u>	
8.0	AAC1885	Tissu à délaminer Release ply B
Comment	Qty.: 8.75 VERGE(s)/Unit Total : 8.75 VERGE(s) Tissu à délaminer Release ply B # de Lot: <u>N/A</u>	
9.0	AAC1887	Wrightlon 5200 Bleu P3
Comment	Qty.: 9.57 VERGE(s)/Unit Total : 9.57 VERGE(s) Wrightlon 5200 Bleu P3 # de Lot: <u>N/A</u>	
10.0	AC0885	Feutre de drainage N° Airweave N 10
Comment	Qty.: 8.00 VERGE(s)/Unit Total : 8.00 VERGE(s)	
11.0	AC0943	Stretchlon 200 poche à vide Vert
Comment	Qty.: 8.00 PIED(s)/Unit Total : 8.00 PIED(s)	
12.0	AC0886	Ruban à gommer jaune #: T/AT-200Y
Comment	Qty.: 3.0000 ROULEAU(s)/Unit Total : 3.0000 ROULEAU(s)	
13.0	PREP-GENERAL	Préparation du matériel
		
Comment	Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs	
Faire le taillage du matériel selon les dimensions requises: Un morceau pour recouvrir le fond du moule N° DT8007. Deux morceaux pour couvrir les extrémités du moule N° DT8007. Deux morceaux pour recouvrir les cotés du moule N° DT8007. Faire cette opération pour les trois plis de 9 oz ainsi que pour les deux plis de 5 oz de Kevlar. Tailler le matériel nécessaire pour la poche à vide (Faire 3 kits car il y aura trois baggings différents lors de la fabrication de cette pièce): Peel Ply Film Durisol P-3 Feutre de drainage Stretchlon 200 Coller une bande de ruban jaune tout le tour du Stretchlon 200, plier les différentes composantes des poches à vide et entreposer en attente des opérations de bagging.		

Date: Jeudi, 2014-09-25 12:13:20
Utilisateur: marc dubé

Feuille de Procédé

Client:	DART US DART AEROSPACE	Nom Dessin:	D2200-1UTILITY POD LID (212)
Numéro Job:	64579	Numéro	DKC134-0079
Numéro Job:			
# Séq.:	Machine ou Opération:	Description :	
	Date: <u>20/10/14</u> Sceau:  		
14.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.	
Comment	Qty.: 1.500 KILOGRAMME(s)/Unit Total: 1.500 KILOGRAMME(s) Résine (411B7530) 411-350 promo. 75min. N° de Lot: <u>4798810AB</u>		
15.0	AMB0286	Catalyst N° DDM-9	
Comment	Qty.: 0.0510 GALLON(s)/Unit Total: 0.0510 GALLON(s) Catalyst N° DDM-9 N° de Lot: <u>1-27821-1</u>		
16.0	PREP-GENERAL	Préparation du matériel	
			
Comment	Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs Mélanger la quantité de résine désirée pour le laminage des trois premier plis du Pod Lid : 1.5% de catalyst DDM-9 par quantité de résine Derakane 411-350 Promoté N° RV411B3020. Date: <u>20/10/14</u> Sceau:  		
17.0	LAMINAGE	Faire le laminage	
			
Comment	Setup: 0.00Hrs/ Run: 12.0000Min Total Run : 0.2000Hrs Faire le laminage des trois premiers plis de tissu (2 plis de 9 oz et 1 pli de 5 oz Kevlar) de la façon suivante: Recouvrir toute la surface du moule N° DT8007 à l'aide de de résine Derakane 411-350 Promoté N° RV411B3020. Ensuite venir laminer un pli de 9 oz dans le fond du moule, suivre avec les deux extrémités et terminer avec les deux cotés. (Ajouter de la résine au besoin) Recommencer pour les deux autres plis (un pli de 9 oz et un pli de 5 oz Kevlar) Date: <u>20/10/14</u> Sceau:  		
18.0	BAGGING	Faire le bagging sur la pièce	
			
Comment	Setup: 0.00Hrs/ Run: 20.0000Min Total Run : 0.3333Hrs Faire la poche à vide sur le moule N° DT8007 selon IG 0012. Date: <u>20/10/14</u> Sceau:  		

Date: Jeudi, 2014-09-25 12:13:20
Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE	Nom Dessin: D2200-1UTILITY POD LID (212)	
Numéro Job: 64579	Numéro: DKC134-0079	
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
19.0	AMB0286	Catalyst N° DDM-9
Comment	Qty.: 0.0135 GALLON(s)/Unit Total : 0.0135 GALLON(s) Catalyst N° DDM-9 # de Lot: <u>1-27829-1</u>	
20.0	DKC134-0065	N° D2200-7 Foam Core (Utility Pod Lid)
Comment	Qty.: 1 UNITE(s)/Unit Total : 1 UNITE(s) N° D2200-7 Foam Core (Utility Pod Lid) N° de Job: <u>64583</u>	
21.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.
Comment	Qty.: 0.400 KILOGRAMME(s)/Unit Total : 0.400 KILOGRAMME(s) Résine (411B7530) 411-350 promo. 75min. # de Lot: <u>4798810AB</u>	
22.0	ASSEMBLAGE	Assemblage mécanique
 		
Comment	Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs Préparer la résine et Sceller le foam core selon IG 0105. Quantité: <u>1</u> Date: <u>30-09-14</u> Sceau: 	
23.0	AAC1611	Polybond B46F
Comment	Qty.: 1.000 KIT(s)/Unit Total : 1.000 KIT(s) Polybond B46F N° de Lot: <u>1-40597-1</u>	
24.0	ASSEMBLAGE	Assemblage mécanique
 		
Comment	Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs Préparer le polybond, l'appliquer ainsi que le foamcore selon le dessin, et faire la poche à vide selon IG 0033. Date: <u>2/10/14</u> Sceau: <u>4102 N.T</u> 	
25.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.
Comment	Qty.: 1.500 KILOGRAMME(s)/Unit Total : 1.500 KILOGRAMME(s) Résine (411B7530) 411-350 promo. 75min. N° de Lot: <u>4798810AB</u>	
26.0	AMB0286	Catalyst N° DDM-9
Comment	Qty.: 0.0510 GALLON(s)/Unit Total : 0.0510 GALLON(s) Catalyst N° DDM-9 N° de Lot: <u>1-27829-1</u>	
27.0	PREP-GENERAL	Préparation du matériel
 		
Comment	Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs Mélanger la quantité de résine désirée pour le laminage des deux derniers plis du Pod Base: 1.5% de catalyst DDM-9 par quantité de résine Derakane 411-350 Promoté N° RV411B3020.	

Date: Jeudi, 2014-09-25 12:13:20
Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE	Nom Dessin: D2200-1UTILITY POD LID (212)	
Numéro Job: 64579	Numéro DKC134-0079	
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
	Date: 22/10/14 Sceau:  	
28.0	LAMINAGE	Faire le laminage
		
Comment Setup: 0.00Hrs/ Run: 120.0000Min Total Run : 2.0000Hrs		
Faire le laminage des deux dernier plis de tissu (1 plis de 5 oz Kevlar et 1 pli de 9 oz) de la façon suivante:		
Recouvrir toute la surface du moule N° DT8007 à l'aide de de résine Derakane 411-350 Promoté N° RV411B3020. Ensuite venir laminer un pli de 5 oz Kevlar dans le fond du moule, suivre avec les deux extrémités et terminer avec les deux cotés. (Ajouter de la résine au besoin)		
Recommencer pour le dernier plis. (un pli de 9 oz)		
	Date: 22/10/14 Sceau:  	
29.0	BAGGING	Faire le bagging sur la pièce
		
Comment Setup: 0.00Hrs/ Run: 20.0000Min Total Run : 0.3333Hrs		
Faire la poche à vide sur le moule N° DT8007 selon IG 0112.		
Laisser sécher jusqu'au lendemain.		
	Date: 22/10/14 Sceau:  	
30.0	DÉMOULAGE	Démoulage de la pièce
		
Comment Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs		
Faire le démoulage du Utility Pod Lid en faisant bien attention de ne pas endommager la pièce.		
Autocontrôle de la qualité du laminage en frappant légèrement sur toute la surface du Pod à l'aide du manche d'un tournevis.		
	Date: 23-10-14 Sceau: 	
31.0	FINITION	Finition Générale
		
Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs		
Sabler légèrement toute la surface intérieure du pod à l'aide de papier sablé grit N° 120.		

Date: Jeudi, 2014-09-25 12:13:20
Utilisateur: marc dubé

Feuille de Procédé

Client:	DART US DART AEROSPACE	Nom Dessin:	D2200-1UTILITY POD LID (212)
Numéro Job:	64579	Numéro	DKC134-0079
Numéro Job: 			
# Séq.:	Machine ou Opération:	Description :	
Vérifier la surface intérieur du pod et injecter à l'aide d'une seringue munit d'une aiguille de la résine au endroit où il y a des bulles d'air. Date: <u>28-10-14</u> Sceau: 			
32.0	TRIMAGE	Trimage	
 			
Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs Faire le trimage du Pod Lid selon le dessin Page 2 de 5 Détail B. Vérifier le trimage du pod. Date: <u>27/10/14</u> Sceau:  			
33.0	AAC1021	Dupont Primer N° 7704S	
Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s) Dupont Primer N° 7704S N° de Lot: <u>47684304A</u>			
34.0	AAC1101	N° 7775S, Dupont Activator - Reducer Chromabase	
Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s) N° 7775S, Dupont Activator - Reducer Chromabase N° de Lot: <u>47684104A</u>			
35.0	PRIMER	Application primer	
 			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs Préparer et Appliquer le primer selon IG 0008. Date: <u>28-10-14</u> Sceau: 			
36.0	FINITION	Finition Générale	
 			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs Faire le sablage au grit N° 180 de la surface primée pour enlever les imperfections restantes. Date: <u>17/12/14</u> Sceau: 			
37.0	AAC1021	Dupont Primer N° 7704S	
Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s) Dupont Primer N° 7704S N° de Lot: <u>1-54556-3</u>			

Date: Jeudi, 2014-09-25 12:13:20

Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE		Nom Dessin: D2200-1UTILITY POD LID (212)	
Numéro Job: 64579		Numéro DKC134-0079	
Numéro Job:			
# Séq.:	Machine ou Opération:	Description :	
38.0	AAC1101	N° 7775S, Dupont Activator - Reducer Chromabase	
Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s) N° 7775S, Dupont Activator - Reducer Chromabase N° de Lot: 4768410 AA			
39.0	PRIMER	Application primer	
			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs Préparer et appliquer le primer selon IG 0008. Date: 17 Dec 2014 Sceau: 			
40.0	INSPEC FINAL	Inspection finale	
			
Comment Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs Faire l'inspection dimensionnelle et visuelle de la pièce selon le dessin . Date: 18-12-2014 Sceau: 			
41.0	EMBAL / ENTREPO	Emballage & Entreposage	
			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs Emballage et Entreposage selon IG 0057. Quantité: 1 Date: 18-12-14 Sceau: 			

Date: Jeudi, 2014-09-25 12:13:22
Utilisateur: marc dubé

Feuille de Procédé

Client	: DART US DART AEROSPACE	Nom Dessin	: D2200-3 UTILITY POD BASE (212)
Numéro Job	: 64582	Numéro Article	: DKC134-0080
Numéro	: 5184	Numéro Dessin	: -
Numéro B.A.	:	Projet Numéro	: DK-362
Cette fois	: 2014-09-25 No. :	Révision dessin	:
Prsht Rev.	: NC	Matériel	: Composite
Prem. fois	: - - Type :	Date Dûe	: 2014-10-02
Job précédente	: 64581	Qté:	1 Ud UNITE
Écrit par	:		
Vérifié & Approuvé par	:		
Commentaires	: N° de dessin: 2200-3 rev. C		



E.O.: N/A

Feuille de Procédé Rév.: 01 AMB0349 remplacé par
AMB0511 (réf. RFC #226)

Formulaire d'inspection: N/A

COPIE

Produit additionnel

Numéro Job:



# Séq.:	Machine ou	Description :
1.0	AAC1616	N° 83634, Frekote Loctite Wolo

Comment Qty.: 0.050 UNITE(s)/Unit Total : 0.050 UNITE(s)
N° 83634, Frekote Loctite Wolo # de Lot: 48028/0AA

2.0	PREP-GENERAL	Préparation du matériel
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Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Faire la préparation du moule # DT8001 selon IG 0009.

Date: 21/11/14 Sceau:

3.0	AMB0350	Gel Coat Blanc N° Gel 944W005
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Comment Qty.: 0.500 KILOGRAMME(s)/Unit Total : 0.500 KILOGRAMME(s)
Gel Coat Blanc N° Gel 944W005 N° de Lot: 4793/10AA

4.0	AMB0286	Catalyst N° DDM-9
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Comment Qty.: 0.0800 GALLON(s)/Unit Total : 0.0800 GALLON(s)
Catalyst N° DDM-9 N° de Lot: 1-22829-1

5.0	GEL COAT	Application du Gel Coat
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Comment Setup: 0.00Hrs/ Run: 20.0000Min Total Run : 0.3333Hrs

Préparer et appliquer le Gel Coat selon IG 0019.

Date: 21/11/14 Sceau:

Date: Jeudi, 2014-09-25 12:13:22

Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE	Nom Dessin: D2200-3 UTILITY POD BASE (212)	
Numéro Job: 64582	Numéro DKC134-0080	
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
6.0	AMB0214	9.7 oz Weave "S" glass #FG-778150-125Y Volan Finish
Comment	Qty.: 20.00 VERGE(s)/Unit Total : 20.00 VERGE(s) 9.7 oz Weave "S" glass #FG-778150-125Y Volan Finish N° de Lot: <u>1-49418-1</u>	
7.0	AAC1608	5oz plain weave Kevlar 50" wide roll
Comment	Qty.: 14.00 VERGE(s)/Unit Total : 14.00 VERGE(s) 5oz plain weave Kevlar 50" wide roll N° de Lot: <u>1-42865-1</u>	
8.0	AMB0511	N° TG-13-U, Fiberglass 13 oz
Comment	Qty.: 3.00 VERGE(s)/Unit Total : 3.00 VERGE(s) N° TG-13-U, Fiberglass 13 oz N° de Lot: <u>1-36302-1</u>	
9.0	PREP-GENERAL	Préparation du matériel
 		
Comment	Setup: 0.00Hrs/ Run: 60.0000Min Total Run : 1.0000Hrs Tailler le matériel suivant selon les dimensions requises : Fibre 9.7 oz, deux bandes servants à couvrir le fond du moule. Fibre 9.7 oz, quatre bandes servants à couvrir les deux bouts en pentes. Fibre 9.7 oz, quatre bandes servants à couvrir les deux cotés du moule. Fibre Kevlar 5 oz, une bande servant à couvrir le fond du moule Fibre Kevlar 5 oz, deux bandes servants à couvrir les deux bouts en pentes. Fibre Kevlar 5 oz, deux bandes servants à couvrir les deux cotés du moule. Fibre 13 oz, deux bandes servant à couvrir les deux cotés supérieur du moule selon le sketch de Dart reçu le 21/5/03 Date: <u>5/12/14</u> Sceau: 	
10.0	AAC1885	Tissu à délaminer Release ply B
Comment	Qty.: 21.87 VERGE(s)/Unit Total : 21.87 VERGE(s) Tissu à délaminer Release ply B # de Lot: <u>N/A</u>	
11.0	AAC1887	Wrightlon 5200 Bleu P3
Comment	Qty.: 23.92 VERGE(s)/Unit Total : 23.92 VERGE(s) Wrightlon 5200 Bleu P3 # de Lot: <u>N/A</u>	
12.0	AC0885	Feutre de drainage N°. Airweave N 10
Comment	Qty.: 20.00 VERGE(s)/Unit Total : 20.00 VERGE(s)	
13.0	AC0886	Ruban à gommer jaune #: T/AT-200Y
Comment	Qty.: 3.0000 ROULEAU(s)/Unit Total : 3.0000 ROULEAU(s)	
14.0	AC0943	Stretchlon 200 poche à vide Vert
Comment	Qty.: 20.00 PIED(s)/Unit Total : 20.00 PIED(s)	

Date: Jeudi, 2014-09-25 12:13:22
Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE		Nom Dessin: D2200-3 UTILITY POD BASE (212)
Numéro Job: 64582		Numéro DKC134-0080
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
15.0	PREP-GENERAL	Préparation du matériel
 		
Comment Setup: 0.00Hrs/ Run: 20.0000Min Total Run : 0.3333Hrs		
Préparer le matériel pour la poche à vide.		
Tissu à délaminer 1.5M de large Film Durisol Perforé P-3 Feutre drainage Ruban à gommer jaune Poche à vide Vert		
Date: 5/2/14 Sceau:  4328 S.B		
16.0	AMB0286	Catalyst N° DDM-9
Comment Qty.: 0.0600 GALLON(s)/Unit Total : 0.0600 GALLON(s) Catalyst N° DDM-9 N° de Lot: 1-27829-1		
17.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.
Comment Qty.: 1.500 KILOGRAMME(s)/Unit Total : 1.500 KILOGRAMME(s) Résine (411B7530) 411-350 promo. 75min N° de Lot: 4849210AA		
18.0	PREP-GENERAL	Préparation du matériel
 		
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs		
Préparer le mélange de résine selon les quantités requises. Mix ratio 1.5% de catalyst DDM-9 par quantité de résine 411-350.		
Date: 28/11/14 Sceau: 		
19.0	LAMINAGE	Faire le laminage
 		
Comment Setup: 0.00Hrs/ Run: 270.0000Min Total Run : 4.5000Hrs		
À l'aide d'un rouleau à peinture dia. 2", appliquer une bonne couche de résine 411-350 sur toutes les surfaces du moule. Laminer le premier pli de 9.7 oz.		
Recommencer la même étape pour le deuxième pli de 9.7 oz, encore une fois pour le pli de Kevlar 5 oz et une dernière fois pour les deux bandes de 13 oz mais seulement sur les cotés supérieurs.		
Date: 28/11/14 Sceau:  4102 N.T 4335 G.V. 4328 S.B		

Date: Jeudi, 2014-09-25 12:13:22
Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE		Nom Dessin: D2200-3 UTILITY POD BASE (212)
Numéro Job: 64582		Numéro DKC134-0080
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
20.0	BAGGING	Faire le bagging sur la pièce
		
Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs		
Appliquer la poche à vide selon IG 0012.		
Date: 8/11/14 Sceau: 4102 N.T 43356.V. 43285.B 		
21.0	AAC1398	N° Demilec B352-0/A100-4, Pourable Rigid Foam
Comment Qty.: 0.016 KIT(s)/Unit Total : 0.016 KIT(s) N° Demilec B352-0/A100-4, Pourable Rigid Foam N° de Lot: 4843510AA		
22.0	ASSEMBLAGE	Assemblage mécanique
		
Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs		
Mesurer pour chaque rainure 100 g de partie A de Demilec et 100 g de partie B de Demilec. Bien mélanger les deux produits et couler doucement dans les rainures.		
Laisser durcir 1 heure puis tailler pour égaliser la mousse avec le fond de la pièce.		
Sceller la mousse selon IG 0105.		
Date: 11/12/14 		
23.0	AMB0375	ATC core-cell A500 plain 4'x8' 3/8" thick
Comment Qty.: 1.000 FEUILLE(s)/Unit Total : 1.000 FEUILLE(s) ATC core-cell A500 plain 4'x8' 3/8" thick N° de Lot: 4687210AA		
24.0	TAILLAGE	Faire le taillage du matériel
		
Comment Setup: 0.00Hrs/ Run: 60.0000Min Total Run : 1.0000Hrs		
Tailler le Foam Core A-500 3/8" tel que décrit sur le dessin D2200.		
Date: 2/12/14 		
25.0	AMB0286	Catalyst N° DDM-9
Comment Qty.: 0.0135 GALLON(s)/Unit Total : 0.0135 GALLON(s) Catalyst N° DDM-9 # de lot: 1-27829-1		
26.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.
Comment Qty.: 0.400 KILOGRAMME(s)/Unit Total : 0.400 KILOGRAMME(s) Résine (411B7530) 411-350 promo. 75min. # de lot: 4849210AA		

Date: Jeudi, 2014-09-25 12:13:22
Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE
Numéro Job: 64582

Nom Dessin: D2200-3 UTILITY POD BASE (212)
Numéro DKC134-0080

Numéro Job:



Séq.: Machine ou Opération: Description :

27.0 ASSEMBLAGE Assemblage mécanique



Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs

Préparer la résine et sceller le foamcore selon IG 0105.

Date: 2/12/14

Sceau:



28.0 AAC1611 Polybond B46F

Comment Qty.: 1.000 KIT(s)/Unit Total : 1.000 KIT(s)
Polybond B46F N° de Lot: 1-40597-1

29.0 ASSEMBLAGE Assemblage mécanique



Comment Setup: 0.00Hrs/ Run: 45.0000Min Total Run : 0.7500Hrs

Préparer le polybond, l'appliquer ainsi que le foamcore selon le dessin, et faire la poche à vide selon IG.0033.

Date: 2/12/14

Sceau:

4328 S.B



30.0 AMB0212 Résine (411B7530) 411-350 promo. 75min.

Comment Qty.: 1.500 KILOGRAMME(s)/Unit Total : 1.500 KILOGRAMME(s)
Résine (411B7530) 411-350 promo. 75min. N° de Lot: 4649210AA

31.0 AMB0286 Catalyst N° DDM-9

Comment Qty.: 0.0510 GALLON(s)/Unit Total : 0.0510 GALLON(s)
Catalyst N° DDM-9 N° de Lot: 1-27829-1

32.0 LAMINAGE Faire le laminage



Comment Setup: 0.00Hrs/ Run: 60.0000Min Total Run : 1.0000Hrs

Tailler deux bandes de 7" de large de Fibre 13 oz pour couvrir le core tel que décrit sur le dessin D2200

Préparer le mélange de Résine selon les quantités requises. Mix ratio 1.5% de catalyst DDM-9 par quantité de résine 411-350.

À l'aide d'un rouleau à peinture dia. 2", appliquer une bonne couche de résine 411-350 sur toutes les surfaces des cores. Laminer la bande de Fibre 13 oz.

Date: 2/12/14

Sceau:



4328 S.B

Date: Jeudi, 2014-09-25 12:13:22

Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE	Nom Dessin: D2200-3 UTILITY POD BASE (212)	
Numéro Job: 64582	Numéro: DKC134-0080	
Numéro Job: 		
# Séq.:	Machine ou Opération:	Description :
33.0	ASSEMBLAGE	Assemblage mécanique
 		
Comment Setup: 0.00Hrs/ Run: 60.0000Min Total Run : 1.0000Hrs		
Tailler le foam core A-500 3/8" pour former les 4 sections transversales. Utiliser un " heat gun " pour former le core.		
Préparer la résine et Sceller le 4 foamcores selon IG 0105.		
Coller les sections de core tel que décrit sur le dessin D2200 en utilisant du Polybond B46F selon IG 0033.		
Date: <u>11/12/14</u> Sceau:  <u>4328 S.B</u>		
34.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.
Comment Qty.: 1.500 KILOGRAMME(s)/Unit Total : 1.500 KILOGRAMME(s) Résine (411B7530) 411-350 promo. 75min. N° de Lot: <u>4849210AA</u>		
35.0	LAMINAGE	Faire le laminage
 		
Comment Setup: 0.00Hrs/ Run: 270.0000Min Total Run : 4.5000Hrs		
<i>1er Laminage</i> Sur chacune des sections transversales de core, laminer une bande de 13oz. À l'aide d'un rouleau à peinture dia. 2", appliquer une bonne couche de résine 411-350 sur toutes les surfaces de la pièce. Laminer le premier pli de 5 oz Kevlar.		
<i>2nd Laminage</i> Recommencer la même étape pour le deuxième pli de Kevlar 5 oz.		
Recommencer la même étape pour le pli de 9.7 oz 7781 S-2.		
Date: <u>12/12/14</u> Sceau: <u>4102 N.T.</u> <u>4297 A.M.</u>  <u>4335 G.V</u>		
36.0	BAGGING	Faire le bagging sur la pièce
 		
Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs		
Appliquer la poche à vide selon IG 0012 sur le moule en faisant bien attention qu'il n'y ai pas de fuite et laisser sécher pendant 12 heures minimum.		
Date: <u>12/12/14</u> Sceau: <u>4102 N.T.</u> <u>4328 S.B</u> <u>4335 G.V.</u> 		

Date: Jeudi, 2014-09-25 12:13:22

Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE

Nom Dessin: D2200-3 UTILITY POD BASE (212)

Numéro Job: 64582

Numéro DKC134-0080

Numéro Job:



Séq.:

Machine ou Opération:

Description :

37.0

DÉMOULAGE

Démoulage de la pièce



Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Démouler la pièce

Inspecter la pièce avec le dessin D2200.

Date: 15/12/14



38.0

TRIMAGE

Trimage

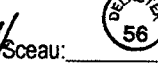


Comment Setup: 0.00Hrs/ Run: 45.0000Min Total Run : 0.7500Hrs

Effectuer le taillage du contour de la pièce selon le dessin D2200

Réparer toutes les imperfections à l'intérieur de la pièce à l'aide du P15-3.

Date: 16/12/14



39.0

AAC1021

Dupont Primer N° 7704S

Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s)
Dupont Primer N° 7704S N° de Lot: j - 54556 - 3

40.0

AAC1101

N° 7775S, Dupont Activator - Reducer Chromabase

Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s)
N° 7775S, Dupont Activator - Reducer Chromabase N° de Lot: 4768410AA

41.0

PRIMER

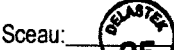
Application primer



Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs

Appliquer le primer selon I.G. 0008

Date: 16 dec 2014



42.0

FINITION

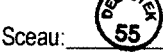
Finition Générale



Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs

Faire le sablage au grit N° 180 de la surface primée pour enlever les imperfections restantes.

Date: 17-12-14



Date: Jeudi, 2014-09-25 12:13:22

Utilisateur: marc dubé

Feuille de Procédé

Client: DART US DART AEROSPACE

Nom Dessin: D2200-3 UTILITY POD BASE (212)

Numéro Job: 64582

Numéro DKC134-0080

Numéro Job:



Séq.:

Machine ou Opération:

Description :

43.0

AAC1021

Dupont Primer N° 7704S

Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s)

Dupont Primer N° 7704S

N° de Lot: J-54556-3

44.0

AAC1101

N° 7775S, Dupont Activator - Reducer Chromabase

Comment Qty.: 0.5000 UNITE(s)/Unit Total : 0.5000 UNITE(s)

N° 7775S, Dupont Activator - Reducer Chromabase

N° de Lot: 4768416 AA

45.0

PRIMER

Application primer



Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs

Appliquer le primer selon IG 0008.

Date: 17 Dec 2014 Sceau:



46.0

INSPEC FINAL

Inspection finale



Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Inspection finale par le département de la qualité (Visuelle) selon le dessin D2200.

Date: 2014-12-18 Sceau:



47.0

EMBAL / ENTREPO

Emballage & Entreposage



Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs

Emballage et Entreposage selon IG 0057.

Quantité: 1 Date: 18-12-14 Sceau:



Linda Lacelle

From: Melody Shapcott <MShapcott@delastek.com>
Sent: January-13-15 3:33 PM
To: Linda Lacelle
Subject: TR: D3192 pod

Hello Linda,

Did you have time to look into your NCR?

I did not advise financial Department yet since I do not consider we should pay the whole amount since we did not have the updated and all of the documentation necessary for quality inspection.

Please let me know if my price of 440.56\$, half and half, works with you.

Thank you,

Melody Shapcott

Gestionnaire de comptes

DELASTEK Inc.

2699, 5e Avenue, Local 14

Grand-Mère, Québec

G9T 2P7

Tel : 819-533-5788 #235

Fax : 819-533-3494

mshapcott@delastek.com

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Devez-vous vraiment imprimer ce courriel ? Pensons à l'environnement ! / Please consider the environment before printing this email

De : Melody Shapcott

Envoyé : 9 janvier 2015 13:32

À : llacelle@dartaero.com

Cc : Scott Bernard; Edowning@dartaero.com; Jocelyne Laurin

Objet : RE: D3192 pod

Hello Linda,

I had a look into your NCR with the utility pod.

My first concern is with Scott's comment below, `` *We do not know the critical visible surfaces, the drawing 2200-3 Rev C is not clear on the finish requirements.* ``

If we do not have all the documentation or specifications from Dart concerning the finish product, it's hard to say we do not pass quality inspection and this is our responsibility.

I understand you need to deliver for the 20th of January. So Delastek would be willing to pay half of the amount you suggested below, instead of 881.12\$ it would be **440.56\$**.

If this is ok with you, let me know and I will send you out a RMA number that you should put on your credit invoice. Then I will advise financial dept. with the RMA# and amount that will be charged.

Please send all requirements and specifications updated as well the latest QSI-006 revision for future orders.

Thank you,

Melody Shapcott

Gestionnaire de comptes

DELASTEK Inc.

2699, 5e Avenue, Local 14

Grand-Mère, Québec

G9T 2P7

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Devez-vous vraiment imprimer ce courriel ? Pensons à l'environnement ! / Please consider the environment before printing this email

De : Scott Bernard

Envoyé : 8 janvier 2015 16:21

À : Edowning@dartaero.com; llacelle@dartaero.com

Cc : Melody Shapcott

Objet : TR: D3192 pod

Importance : Haute

Hello Eric,

Is it possible to provide us better pictures?

I have verified our internal requirements regarding the surface finish on this part. We do not know the critical visible surfaces, the drawing 2200-3 Rev C is not clear on the finish requirements.

I have also verified QSI-006, we have one electronic copy available at Delastek, however, it seems that we are not having the last revision. Is it possible to provide us the last one?

Regards

Scott Bernard

Coordonnateur qualité / Quality coordinator

DELASTEK Inc.

2699, 5e Avenue, Local 14

Grand-Mère, Québec

G9T 2P7

Tel : 819-533-5788 #264

Fax : 819-533-3494

sbernard@delastek.com

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Devez-vous vraiment imprimer ce courriel ? Pensons à l'environnement ! / Please consider the environment before printing this email

De : Melody Shapcott

Envoyé : 8 janvier 2015 16:06

À : Scott Bernard

Objet : TR: D3192 pod

Importance : Haute

For you.

Melody Shapcott

Gestionnaire de comptes

DELASTEK Inc.

2699, 5e Avenue, Local 14

Grand-Mère, Québec

G9T 2P7

Tel : 819-533-5788 #235

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Devez-vous vraiment imprimer ce courriel ? Pensons à l'environnement ! / Please consider the environment before printing this email

De : Linda Lacelle [<mailto:llacelle@dartaero.com>]

Envoyé : 7 janvier 2015 14:33

À : Melody Shapcott

Cc : Jocelyne Laurin; Eric Downing; Nigel Forbes

Objet : FW: D3192 pod

Importance : Haute

Bonjour,

We are in the process of assembling the pod that arrived on PO25888, and the inside of the pod is very rough and will have to use filler to smooth it out, sand and re-prime. We do not have the time to send it back, as this MUST ship no later than Jan 20th to our customer.

We estimate that this will take 9hrs of labor - we will take the labor rate of our painters of 70.43/hr (compared to our small fab dept. - 81.45/hr), plus the filler - 1 gallons of Epocast 1618 A/B - 247.25/gallon, for a total of 881.12.

Please advise your financial dept. that we will be charging these fees back to Delastek.

Thank you,

Linda

From: Eric Downing

Sent: January-07-15 2:03 PM

To: Linda Lacelle

Subject: D3192 pod

Linda

Here is the NCR regarding the finish of the utility pod.

Thanks

With Kind Regards

Eric Downing

QA Coordinator

T: 1-613-632-5200 ext 223

C: 1-613-363-9375

F: 1-613-632-5246

www.dartaero.com

Edowning@Dartaero.com



Linda Lacelle

From: David Shepherd
Sent: December-23-14 12:10 PM
To: Linda Lacelle; Alex Pharand; Patrick Smith
Cc: Mike Petsche
Subject: Re: D2461

Linda,

As discussed, the 212 pod is installed on the outside of the helicopter so burn certs are not required. Go ahead and ship the pod as scheduled.

David

From: Linda Lacelle
Sent: Tuesday, December 23, 2014 9:55 AM
To: Alex Pharand; Patrick Smith
Cc: David Shepherd; Mike Petsche
Subject: D2461

It was just brought to my attention that we might not be able to install the D2461 seal on the pod because we can't find proof of burn testing..?? this pod is being picked up at 4 today, if it won't be ready, we need to advise the customer asap...and why is the burn test an issue today, when we have been using this seal since 1997 ???

Linda

DQA:

Date: 15/03/31



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 15/03/30.

Work Order update only ☐

Work Order: 124755	DISPOSITION		AGAINST DEPARTMENT/PROCESS			
Part No. D3192-042	Rework ☐	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	
NCR No. 15-4742	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	
	Use-as-is ☒	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	
	Suspected Unapproved ☐	Large Fab ☐	Composite ☒	Supplier ☐		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	15/1/20	150	30	Replace AN3-11A by AN3-10-A X30	A.P. 15.01.20	X30 AN3-10A M 130466 MUST PASS END OF NUT BY 1.5-4 THREADS TO BE IN SAFETY	SMB 15/1/20	DAS 9 9-89 15-01-20	DAS 9 9-89 15-01-20
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process	X			RC Bolt are too long					
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear		General					
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions	☐ Pressure/Forced			
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Set-up			
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect	☐ Temperature/Cure			
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing	☐ Weld			
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved	☐ Wrong Stock Pulled			
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong				
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge	☐ Other			
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread					
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set					
☐ Turning Sequence	☐ Finish	☐ Out of Calibration					
☐ Wave/Twist in Tube	☒ Fit/Function	☐ Out of Sequence					

DQA:

Date: 15/03/31

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date: 15/03/31

Work Order update only ☐

Work Order: <u>124755</u>	DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS					
Part No. <u>D 3192-042</u>		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐		
NCR No. <u>15-4758</u>		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Large Fab ☐	Composite ☒	Supplier ☐			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling	15/1/20	150	1	open hole to .266 to make the mounting frame to fit the base pad	A.P. 15.01.20	open hole to max fix to fit mounting frame <u>Ø.266</u> MAX (FREE FIT)	Shm 15/1/20	68-6 6 SVD 15-01-20	DAS 9 9-89 15-01-20
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY			
Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☒ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Linda Lacelle

From: Jean-Luc Menard
Sent: January-12-15 10:24 AM
To: Linda Lacelle
Subject: RE: shims

Use 3/8", use the same program as last time (see below)

JL

From: Linda Lacelle
Sent: January-12-15 10:18 AM
To: Jean-Luc Menard
Subject: RE: shims

Need more shims for the next pod :

1" x 1"

.285

.219

.290

.315

With center holes..

Let me know what thickness to use and when the dxfs are done pls..

Merci

L

From: Jean-Luc Menard
Sent: December-22-14 10:27 AM
To: Linda Lacelle
Subject: RE: shims

PROG IS IN APP/DXXX-XXX-XXX/D212-805 CUSTOM SHIM.

Make them out of 3/8, we will need to face them to size.

JL

Give to JL

Alodine H & 15-1-13

DAS 34 9.89

~~prime~~ grey sandpaper
powder coat
M128564

H & B-1-13

DAS 34 9.89

START: 1:40.

OVEN T: 300°

FINISH 2:10.

6061T6

X4 .375 x 2.00

B 126075